

1. In a computing system that is capable of dispatching data structures for processing by groups of one or more methods, a method for the computing system to perform deterministic rule-based dispatch of the data structure to a group of one or more methods for further processing, the dispatch being deterministic despite the existence of multiple rules that conflict regarding where the data structure should be dispatched, the method comprising the following:

an act of accessing a data structure that is to be processed;

an act of evaluating a list of rules to identify a plurality of rules that apply to the dispatch of the data structure, each of the plurality of rules specifying a different group of one or more methods to which the data structure should be dispatched;

an act of resolving the plurality of rules to identify a prevailing rule that will be applied for the dispatch of the data structure; and

an act of dispatching the data structure to the group of one or more methods specified by the prevailing rule.

2. A method in accordance with Claim 1, wherein the data structure is a message, and wherein the act of accessing a data structure comprises an act of receiving the message over a network.

3. A method in accordance with Claim 1, wherein the act of resolving the plurality of rules to identify a prevailing rule comprises the following:

an act of applying a first prioritization mechanism.

4. A method in accordance with Claim 3, wherein the first prioritization mechanism is selected from the group consisting of: an express dominance mechanism, a prioritization level mechanism, and a unique identifier comparison mechanism.

5. A method in accordance with Claim 3, wherein the application of the first prioritization mechanism narrows the plurality of rules to the prevailing rule.

6. A method in accordance with Claim 5, wherein the application of the first prioritization mechanism guarantees that only one rule will prevail under any circumstances from the plurality of rules.

7. A method in accordance with Claim 3, wherein the act of resolving the plurality of rules to identify a prevailing rule further comprises the following:

an act of determining that the application of the first prioritization mechanism still resulted in more than one rule; and

in response, an act of applying a second prioritization mechanism.

8. A method in accordance with Claim 7, wherein the second prioritization mechanism is selected from the group consisting of: an express dominance mechanism, a prioritization level mechanism, and a unique identifier comparison mechanism.

9. A method in accordance with Claim 7, wherein the application of the second prioritization mechanism narrows the plurality of rules to the prevailing rule.

10. A method in accordance with Claim 9, wherein the application of the second prioritization mechanism guarantees that only one rule will prevail under any circumstances from the plurality of rules.

11. A method in accordance with Claim 7, wherein the act of resolving the plurality of rules to identify a prevailing rule further comprises the following:

an act of determining that the application of the second prioritization mechanism still resulted in more than one rule; and

in response, an act of applying a third prioritization mechanism.

12. A method in accordance with Claim 11, wherein the third prioritization mechanism is selected from the group consisting of: an express dominance mechanism, a prioritization level mechanism, and a unique identifier comparison mechanism.

13. A method in accordance with Claim 11, wherein the application of the third prioritization mechanism narrows the plurality of rules to the prevailing rule.

14. A method in accordance with Claim 13, wherein the application of the third prioritization mechanism guarantees that only one rule will prevail under any circumstances from the plurality of rules.

15. A method in accordance with Claim 11, wherein application of the third prioritization mechanism does not narrow the plurality of rules to the prevailing rule, the method further comprising the following:

an act of continuing application of prioritization rules until the plurality of rules is narrowed down to just the prevailing rule.

16. A method in accordance with Claim 1, wherein the group of one or more methods comprises a single method.

17. A method in accordance with Claim 1, wherein the group of one or more methods comprises a temporally-ordered chain of a plurality of methods.

18. A method in accordance with Claim 1, wherein the data structure is a first data structure, the plurality of rules is a first plurality of rules, the prevailing rule is a first prevailing rule, and the group of one or more method is a first group of one or more methods, the method further comprising the following:

an act of accessing a second data structure that is to be processed;

an act of evaluating the list of rules to identify a second plurality of rules that apply to the dispatch of the second data structure, each of the second plurality of rules specifying a different group of one or more methods to which the data structure should be dispatched;

an act of resolving the second plurality of rules to identify a second prevailing rule that will be applied for the dispatch of the data structure; and

an act of dispatching the second data structure to the second group of one or more methods specified by the second prevailing rule.

19. A method in accordance with Claim 18, wherein the first prevailing rule is the same as the second prevailing rule such that the first group of one or more methods is the same as the second group of one or more methods.

20. A method in accordance with Claim 18, wherein the first prevailing rule is different than the second prevailing rule and the first group of one or more methods is different than the second group of one or more methods.

21. A method in accordance with Claim 20, wherein one or more methods in the first group of one or more methods are also in the second group of one or more methods.

22. A method in accordance with Claim 21, wherein the group of one or more methods are executed by the computing system.

23. A method in accordance with Claim 21, wherein the computing system is a first computing system, the group of one or more methods being executed by a second computing system that the first computing system is capable of communicating with over a network, the act of dispatching the data structure to the group of one or more methods comprising the following:

an act of sending the data structure to the second computing system over the network.

24. A method in accordance with Claim 1, wherein the data structure is a Simple Object Access Protocol (SOAP) envelope.

25. A method in accordance with Claim 24, wherein the list or rules is expressed using XPATH statements.

26. A method in accordance with Claim 1, wherein the list or rules is expressed using XPATH statements.

27. A method in accordance with Claim 1, further comprising:  
an act of accessing an instruction to amend the list of rules; and  
an act of automatically amending the list of rules in response to the instruction.

28. A computer program product for use in a computing system that is capable of dispatching data structures for processing by groups of one or more methods, the computer program product for implementing a method for the computing system to perform deterministic rule-based dispatch of the data structure to a group of one or more methods for further processing, the dispatch being deterministic despite the existence of multiple rules that conflict regarding where the data structure should be dispatched, the computer program product comprising one or more computer-readable media that have thereon computer-executable instructions that, when executed by one or more processors of the computing system, cause the computing system to perform the following:

an act of accessing a data structure that is to be processed;

an act of evaluating the list of rules to identify a plurality of rules that apply to the dispatch of the data structure, each of the plurality of rules specifying a different group of one or more methods to which the data structure should be dispatched;

an act of resolving the plurality of rules to identify a prevailing rule that will be applied for the dispatch of the data structure; and

an act of dispatching the data structure to the group of one or more methods specified by the prevailing rule.

29. A computer program product in accordance with Claim 28, wherein the one or more computer-readable media comprise physical memory media.

30. A computer program product in accordance with Claim 29, wherein the physical memory media comprises persistent memory.

31. A computer program product in accordance with Claim 29, wherein the physical memory media comprises system memory.

32. A computer program product in accordance with Claim 28, wherein the data structure is a message, and wherein the act of accessing a data structure comprises an act of receiving the message over a network.

33. A computer program product in accordance with Claim 28, wherein the act of resolving the plurality of rules to identify a prevailing rule comprises the following:

an act of applying a first prioritization mechanism.

34. A computer program product in accordance with Claim 33, wherein the application of the first prioritization mechanism narrows the plurality of rules to the prevailing rule.

35. A computer program product in accordance with Claim 33, wherein application of the first prioritization mechanism does not narrow the plurality of rules to the prevailing rule, the method further comprising the following:

an act of continuing application of prioritization rules until the plurality of rules is narrowed down to just the prevailing rule.

36. A computer program product in accordance with Claim 28, the method further comprising:

an act of accessing an instruction to amend the list of rules; and



an act of automatically amending the list of rules in response to the instruction.

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37. In a computing system that is capable of dispatching data structures for processing by groups of one or more methods, a method for the computing system to perform deterministic rule-based dispatch of the data structure to a group of one or more methods for further processing, the dispatch being deterministic despite the existence of multiple rules that conflict regarding where the data structure should be dispatched, the method comprising the following:

an act of accessing a data structure that is to be processed; and

a step for using a list of rules to deterministically dispatch the data structure to a group of one or more methods.

38. A method in accordance with Claim 37, wherein the step for using a list of rules to deterministically dispatch the data structure to a group of one or more methods comprises the following:

an act of evaluating the list of rules to identify a plurality of rules that apply to the dispatch of the data structure, each of the plurality of rules specifying a different group of one or more methods to which the data structure should be dispatched;

an act of resolving the plurality of rules to identify a prevailing rule that will be applied for the dispatch of the data structure; and

an act of dispatching the data structure to the group of one or more methods specified by the prevailing rule.

39. A method in accordance with Claim 37, wherein the data structure is a message, and wherein the act of accessing a data structure comprises an act of receiving the message over a network.

40. A computing system comprising the following:

one or more processors;

system memory;

one or more computer-readable media having thereon a list of rules, each rules specifying a condition and a group of one or more methods that a data structure should be dispatched to if the condition is met, the one or more computer-readable media further having thereon computer-executable instructions that, when executed by the one or more processors, causes the computing system to instantiate in the system memory the following:

a comparison module configured to access a data structure and evaluate the list of rules to identify a plurality of rules that apply to the dispatch of the data structure;

a plurality of prioritization mechanisms configured to identify which conflicting rules take priority, at least one of the prioritization mechanisms guarantying only one prevailing rule;

a resolution module configured to use the plurality of prioritization mechanisms to identify the prevailing rule that will be applied for the dispatch of the data structure; and

a dispatching mechanism configured to dispatch the data structure to the group of one or more methods specified by the prevailing rule.